

**CYCLIC ETHER VITAMIN D3 COMPOUNDS,  
1 $\alpha$ (OH) 3-EPI- VITAMIN D3 COMPOUNDS  
AND USES THEREOF**

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**Abstract of the Disclosure**

Novel cyclic ether vitamin D3 compounds having a cyclic ether side chain are disclosed. These compounds were first identified as metabolites of 3-epi vitamin D3  
10 produced via a tissue-specific metabolic pathway which catalyzes the formation of a cyclic ether structure. Also disclosed are 1 $\alpha$ (OH) 3-epi vitamin D3 compounds, which are produced via the epimerization of a 3- $\beta$ -hydroxyl group of 1 $\alpha$ (OH) vitamin D3 precursor *in vivo*. The vitamin D3 compounds of the present invention can be used as  
15 substitutes for natural and synthetic vitamin D3 compounds.

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